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Europäisches  
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Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n°.

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Anmelder/Applicant/Demandeur/Patentinhaber/Propriétaire/Titulaire

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD.

## COMMUNICATION

The European Patent Office herewith transmits as an enclosure the European search report for the above-mentioned European patent application.

If applicable, copies of the documents cited in the European search report are attached.

☒ Additional set(s) of copies of the documents cited in the European search report is (are) enclosed as well.

The following specifications given by the applicant have been approved by the Search Division:

☒ abstract

☐ title

☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.

The following figure will be published together with the abstract: 138

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.





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# EUROPEAN SEARCH REPORT

Application Number  
EP 01 11 8510

## DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	EP 0 448 492 A (ETAT FRANÇAIS, TELEDIFFUSION DE FRANCE) 25 September 1991 (1991-09-25) * abstract * * page 4, line 21 - line 22 * * page 4, line 32 - line 35 * * page 6, line 52 - line 55 * * page 7, line 11 - line 12 * * page 9, line 1 - line 5 *	1-4	H04L27/26
X	WO 86 07223 A (TELEBIT) 4 December 1986 (1986-12-04) * page 12, line 29 - line 32 * * page 15, line 14 - line 26 *	1-4	
L	This document also completes the disclosure of GB 2 187 611 A		
X	GB 2 187 611 A (TELEBIT) 9 September 1987 (1987-09-09) * page 4, right-hand column, line 78 - line 86 * * page 5, left-hand column, paragraph 61 - paragraph 64 *	1-4	
A	HOEHER ET AL.: "Performance of and RCPC-coded OFDM-based digital audio broadcasting (DAB) system" IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, 2 - 5 December 1991, pages 40-46, XP000325944 New York, US * page 40, right-hand column, paragraph 3 * * page 42, right-hand column, paragraph 2 *	1-4	
The present search report has been drawn up for all claims			

TECHNICAL FIELDS  
SEARCHED (Int.Cl.7)

H04L

Place of search

THE HAGUE

Date of completion of the search

31 July 2002

Examiner

Scriven, P

### CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone  
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A : technological background  
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## EUROPEAN SEARCH REPORT

Application Number  
EP 01 11 8510

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X,P	EP 0 531 046 A (AT&T) 10 March 1993 (1993-03-10) * column 4, line 47 - line 51 *	1-4	
X,P	EP 0 506 400 A (MATSUSHITA) 30 September 1992 (1992-09-30) * page 16, line 15 - line 17 *	1-4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 31 July 2002	Examiner Scriven, P
CATEGORY OF CITED DOCUMENTS			
<p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding</p>			

EP 01 11 8510

31-07-2002

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
EP 0448492	A	25-09-1991	FR	2660131 A1	27-09-1991
			DE	69110716 D1	03-08-1995
			DE	69110716 T2	01-02-1996
			EP	0448492 A1	25-09-1991
			US	RE36430 E	07-12-1999
			US	5197061 A	23-03-1993
WO 8607223	A	04-12-1986	US	4679227 A	07-07-1987
			AU	3528189 A	21-09-1989
			AU	587037 B2	03-08-1989
			AU	5817786 A	24-12-1986
			AU	609355 B2	26-04-1991
			AU	6009690 A	15-11-1990
			BR	8606677 A	11-08-1987
			CA	1251586 A1	21-03-1989
			CN	86103406 A , B	26-11-1986
			CN	1048774 A	23-01-1991
			CN	1048775 A , B	23-01-1991
			CN	1048776 A , B	23-01-1991
			DE	3681887 D1	14-11-1991
			DK	31087 A	20-01-1987
			EP	0224556 A1	10-06-1987
			ES	555086 D0	01-10-1987
			ES	8708271 A1	16-12-1987
			ES	557355 D0	01-12-1987
			ES	8801072 A1	16-02-1988
			JP	6003956 B	12-01-1994
			JP	62502932 T	19-11-1987
			MX	164557 B	28-08-1992
			NO	870219 A	19-01-1987
			PT	82600 A , B	28-11-1986
			US	4731816 A	15-03-1988
			WO	8607223 A1	04-12-1986
			US	4833706 A	23-05-1989
			US	5054034 A	01-10-1991
			ZA	8602718 A	30-12-1986
GB 2187611	A	09-09-1987	US	4757495 A	12-07-1988
			JP	63272151 A	09-11-1988
EP 0531046	A	10-03-1993	US	5243629 A	07-09-1993
			EP	0531046 A2	10-03-1993
			JP	5218978 A	27-08-1993
EP 0506400	A	30-09-1992	CN	1066946 A , B	09-12-1992
			DE	69223541 D1	29-01-1998

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 11 8510

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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31-07-2002

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0506400 A		DE 69223541 T2	09-04-1998
		DE 69232523 D1	02-05-2002
		DE 69232526 D1	02-05-2002
		DE 69232527 D1	02-05-2002
		DE 69232529 D1	02-05-2002
		DE 69232530 D1	02-05-2002
		EP 1049334 A1	02-11-2000
		EP 0506400 A2	30-09-1992
		EP 0766478 A2	02-04-1997
		EP 0975168 A1	26-01-2000
		EP 0973335 A1	19-01-2000
		EP 0975169 A1	26-01-2000
		EP 0975170 A1	26-01-2000
		EP 0975171 A1	26-01-2000
		EP 0975172 A1	26-01-2000
		EP 0975173 A1	26-01-2000
		EP 0975174 A1	26-01-2000
		JP 3008651 B2	14-02-2000
		JP 5327807 A	10-12-1993
		JP 3061053 B2	10-07-2000
		JP 2000032074 A	28-01-2000
		JP 3061054 B2	10-07-2000
		JP 2000032075 A	28-01-2000
		JP 3061055 B2	10-07-2000
		JP 2000032076 A	28-01-2000
		JP 3092620 B2	25-09-2000
		JP 2000032077 A	28-01-2000
		JP 3092621 B2	25-09-2000
		JP 2000032078 A	28-01-2000
		JP 3061056 B2	10-07-2000
		JP 2000032079 A	28-01-2000
		JP 2000078222 A	14-03-2000
		JP 3112012 B2	27-11-2000
		JP 2000106579 A	11-04-2000
		JP 3112013 B2	27-11-2000
		JP 2000106580 A	11-04-2000
		JP 3114727 B2	04-12-2000
		JP 2000106581 A	11-04-2000
		JP 3114728 B2	04-12-2000
		JP 2000106582 A	11-04-2000
		JP 3112014 B2	27-11-2000
		JP 2000106583 A	11-04-2000
		JP 2001160838 A	12-06-2001
		JP 2001160833 A	12-06-2001
		JP 2001217890 A	10-08-2001
		KR 9602703 B1	24-02-1996

EP 01 11 8510

31-07-2002